Assistive Technology Program (ATP)
Physical Medicine and Rehabilitation (PM&R)
Minneapolis VA Health Care System (MVAHCS)

Introduction

PROGRAM OVERVIEW

The MVAHCS ATP provides consulting services to the inpatient, interdisciplinary, acute rehabilitation program for survivors of serious injury or illness. Patients are admitted with a range of etiologies and diagnoses. The ATP offers specialized programming in *Brain Injury (BI)* rehabilitation. Patients with historical connections to the CIIRP may be admitted for brief respite stays and be seen by the ATP.

ATP services are provided by a Rehabilitation Engineer (1.0FTE) and a Physical Therapist (0.2FTE). Inpatients may be seen bedside, during related therapy sessions (OT, PT, SLP) or in one of the Assistive Technology Labs. In special circumstances, the patient may be seen by the rehabilitation engineer or PT in the home after discharge. Programming is designed to pursue goals and outcomes defined by persons served.

The AT Program augments services of the PM&R BI rehabilitation continuum in partnership with the BI specialty programs in our Polytrauma Transitional Rehabilitation program and our outpatient BI rehab program. The CIIRP BI program serves as the upper Midwest Polytrauma Rehabilitation Center (PRC) in the VHA polytrauma/TBI System of care. More information can be found at http:/minneapolis.va.gov/services/pmr.

The AT Program is pursuing accreditation by the Commission on Accreditation of Rehabilitation Facilities (CARF). The accreditation evaluation will occur in the first quarter of May 2015.

PURPOSE OF THIS DOCUMENT

This document provides a description of MVAHCS PM&R AT Program. This version was written in late 2014 and is based on 2014 CARF Employment and Community Services standards.

MORE INFORMATION

More information about MVAHCS PM&R programming, including the AT Program, can be found at the "Programs and Services" page of the Minneapolis URL listed above. This information includes the most recent "Year in Review" pdf that provides participant demographics and program outcomes. Specific questions can be directed to the AT Program director, Dr. Brian Fay (brian.fay@va.gov).

Parameters

Characteristics of populations served	We serve male and female, Veteran and Active Duty Service Members (ADSM). Most have recent onset rehabilitation needs related to Brain Injury.
Settings	Services are provided on the 18 bed unit, in and on the grounds of the medical center, or in the community.
Days and Hours of Service	The Rehabilitation Engineer is onsite 7:30AM – 6:00PM MTuThF, and the Physical Therapist is onsite 8:00AM – 4:00PM M-F.
Frequency of services	Inpatients are not typically seen daily but instead 1-2 times per week depending on the individualized plan of care.
Payer sources	Veterans are covered through the VHA eligibility system. ADSM's are covered under a Memorandum of Agreement with the Department of Defense (DoD.)
Fees	Fees are calculated per individual Means Tests. Fee information is shared via a Rehab Disclosure Statement provided near admit. Case managers can facilitate meetings between persons served and the Business Office for further discussion.
Referral Sources	Referrals are from MVAHCS, other VA Medical Centers, the DoD, and community providers.
Specific services offered	We provide or coordinate all therapeutic, medical, and surgical services required by persons served. *Brain Injury:* Specialized programming includes our *Emerging Consciousness (EC)* program for severely injured patients with disorders of consciousness.

Table 1: Scope of service parameters

Age	Young adult to geriatric.
Activity limitations	Limitations range from complete physical and/or cognitive dependence to independence.
Behavioral or psychological status	Individuals who pose a danger to themselves or others are deferred to a more appropriate setting of care.
Cultural needs	Services and treatment support cultural, religious, gender, age, and other interests and beliefs. Customization of patient rooms is supported.
Impairments	Changes in body structures or functions include BI, limb loss, hearing loss, vision loss, and orthopedic injuries.
Intended discharge environments	Targeted discharge is to an environment that supports the greatest possible degree of independence and social inclusion/participation possible.
Medical acuity	The CIIRP is able to provide or coordinate care for acutely ill patients, though increased acuity may require an alternate rehabilitation plan in an alternate nursing unit. The CIIRP does not admit patients who are ventilator dependent. *Amputation:* Those admitted may be in the acute phase of recovery following amputation. Planned admits are screened via infection control parameters which may impact elements of care (contact precautions, single room assignments, etc.) Positive screening does not preclude admission.
Medical stability	Patients must have sufficient medical stability to tolerate their planned rehabilitation program. *Amputation:* For prosthetic training, stability includes the readiness of the residual limb (e.g. adequate incision healing post surgery.)
Participation restrictions	Some patients are fully dependent on others while others are able to leave the grounds via passes with family members. Those admitted are deemed capable of participating in community integration programming and community-based excursions as feasible.

Table 2: Parameters of persons served

Specific Arrangements for non-PM&R Services

	Availability on site	*Capacity*	*Timeliness of response to orders*	*Timeliness of response to the clinician who placed the orders*
Medical services	Yes	Unlimited	Based on urgency, within 24 hours for inpt care.	Within 24 hours.
Diagnostic imaging	Yes	Unlimited	Based on urgency. Average timeframe is 1 hour or less. A proactive phone call to Imaging supervisor is required for STAT requests on evenings, weekends, and holidays.	Based on urgency. After exam is completed, results are entered in CPRS within 15 minutes to 2 hours.
Laboratory services	Yes	Unlimited	Based on urgency.	Based on tests ordered. Critical results are called to the provider emergently.
Pharmacy services	Yes	Unlimited	30 minutes or less.	30 minutes or less.

Table 3: Availability of non PM&R, in-house services for all CIIRP patients.

Criteria and Process Descriptions

ADMISSION CRITERIA

Please see figure 1 for a summary of the process. Admission into the AT Program is initiated via a consult request sent by a physician or rehabilitation therapist such as occupational, physical or speech therapist. During the initial meeting with the patient, a screening is performed via chart review and face-to-face appointment. If the patient is appropriate for AT Program services, the patient is admitted. Criteria for admission include:

1. Patient is a veteran eligible for healthcare services provided by the Veterans Health Administration (VHA).
2. Patient has a temporary or permanent disability which will benefit from assistive technology in one of eight tracks.
3. Assistive Technology tracks include:
    a. Wheeled Mobility and Seating;
    b. Assistive Technology for Cognition;
    c. Augmentative and Alternative Communication;
    d. Environmental Control;
    e. Computer and related Technology;
    f. Driver's Rehabilitation/Adapted Driving;
    g. Adapted Recreation;
    h. Visual Impairment.
4. Patient is interested in and willing to participate in a program of training to use assistive technology. For patients unable to communicate, the patient's

representative expresses approval or the AT is part of typical and customary therapeutic services for patient's disability.

DEFERRAL CRITERIA

1. The person declines AT Program services.
2. The person's needs do not involve one of the AT tracks.

TREATMENT PROCESS AND CONTINUING STAY CRITERIA

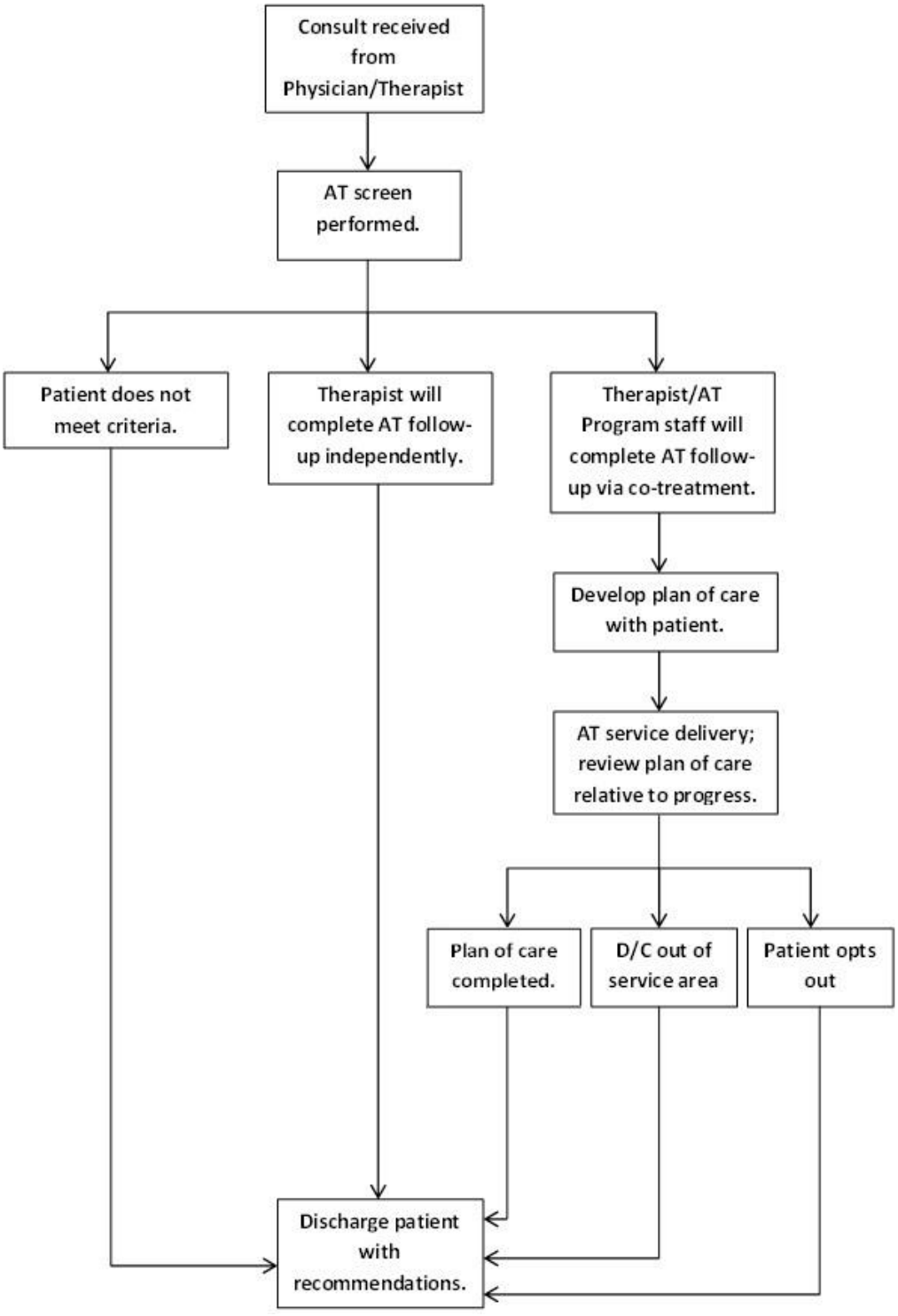
Each person's assistive technology needs are based on the rehabilitation program developed after an interdisciplinary assessment of individual strengths, impairments, limitations, restrictions, medical problems, resources, interests and preferences. These needs are used as input to the SETT model for AT service delivery originally developed by Zabala[REF].

Key points across each admission include:

1. Initial goal setting via SETT model analysis:
    a. Assess abilities of the person, the person's environment, tasks required of the person, and tools to enable the person. Following the assessment, the Rehabilitation Engineer meets with therapists to coordinate the treatment plan.
        - Goals of the person served are incorporated into the treatment plan
        - Discipline-specific and Interdisciplinary Short term and long term goals are set.
        - Predictions are made for length of stay, discharge disposition, and level of function at discharge.
    b. The treatment plan and predictions are discussed with the person served.
2. Reevaluation
    a. Progress on treatment goals is measured by the AT Program, the person served, and family members.
    b. The AT Program often attends Interdisciplinary team rounds that are held weekly or biweekly, as appropriate. Areas of discussion include:
        - Assessment of current function
        - Progress towards goals
        - Barriers to progress
        - Review of resources
        - Review of length of stay
        - Review of discharge plans
        - Review of goals of the person served
        - Review of educational needs for the person served and family member.

DISCHARGE PROCESS AND CRITERIA

1. When the person served has reached his/her goals, is no longer making progress, or is no longer able to participate in the program, arrangements for discharge are made.
2. The decision to discharge is made in collaboration with the person served, the family, and other stakeholders as appropriate.
3. Discharge planning is done in a coordinated fashion with all members of the IDT. Available resources, ongoing care requirements, and long term needs are considered.
4. Clinical follow up is arranged either through MVAHCS outpatient services or in the discharge community
5. Discharge plans are summarized in a written discharge summary. Social Work, nursing, and discipline-specific discharge summaries are also written.
6. Following discharge, continuity of care is arranged by the case manager(s). This may include:
    a. Outpatient care by the current PM&R team members
    b. Outpatient care by different PM&R staff or by VA or local providers in the home community.
    c. Admission to a Transitional Rehabilitation program, subacute/extended care setting, or nursing home.
    d. Referral to community agencies


Consult received from Physician/Therapist
AT screen performed.
Patient does not meet criteria.
Therapist will complete AT follow-up independently.
Therapist/AT Program staff will complete AT follow-up via co-treatment.
Develop plan of care with patient.
AT service delivery; review plan of care relative to progress.
Plan of care completed.
D/C out of service area
Patient opts out
Discharge patient with recommendations.

Performance Measurement and Management System

The AT Program operates under the direction of the Medical Director in connection with the Medical Directors of the specialty programs, Nursing service, and the various PM&R departments. Program performance is evaluated regularly on an established set of parameters as well as ad-hoc reviews of unexpected situations or incidents.

Status reviews, performance improvement projects, and other discussions are held in a monthly meeting between the PM&R Head and AT Program Director. New developments are shared with PM&R leadership via secure email communication between monthly meetings. The AT Program also participates in quarterly conference call with AT Programs at other VA Medical Centers. Via these mechanisms the AT Program is in regular conversation with leadership of the MVAHCS Extended Care and Rehabilitation Patient Service Line (EC&R PSL), Veterans Integrated Service Network 23 (VISN), and VHA Polytrauma and PM&R Central Office.

Outcomes measurement is performed on an ongoing basis using two standardized tools:

1. uSPEQ® Consumer Survey
2. QUEST 2.0 – Quebec User Evaluation of Satisfaction with assistive Technology[2]
3. FMA – Functional Mobility Assessment[3]

The uSPEQ® Consumer Survey is administered by mailing to recently discharged patients. The Survey contains question relating to the quality of care including three questions related to technology. The QUEST 2.0 is used to consider patient satisfaction with AT devices and services for all AT other than wheeled mobility. The FMA is used to consider pre/post satisfaction with prescription of mobility devices. Results from these tools are discussed in therapy department meetings and therapy specialty groups. Documents of interest to the general public are posted on the PM&R pages of the MVAHCS Web site.

Key discussions and Formal Reports include:

1. Access, including deferral rates and reasons, occupancy rates, average numbers of treatment hours, and lengths of stay
2. Patient demographics
3. Accessibility Review and Risk Mitigation
4. Effectiveness and efficiency outcomes via Functional Independence Measures (FIM)
5. Falls monitoring
6. Infection control
7. Disruptions in care
8. Medical records reviews for adequate documentation
9. Success at predicting outcomes for discharge status
10. Pressure ulcers
11. Restraint use
12. Stakeholder satisfaction

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3. Kumar A, Schmeler MR, Karmarkar AM, Collins DM, Cooper R, Cooper RA, Shin H, Holm MB. (2013). Test-retest reliability of the functional mobility assessment (FMA): a pilot study. Disabil Rehabil Assist Technol. 8. 213-9.